

substantially rigid mechanical core adapted to accept a mechanical attachment outside the unconstrained diameter;

a socket having first substantially smooth and rigid opposing concave interior surfaces shaped to substantially conform to the substantially spherical portion of the coupling member,
5 one of the smooth concave surfaces having an indentation formed therein; and

an adjustable clamp disposed subsequently in a plurality of different adjustment relationships to the opposing concave socket surfaces,

one adjustment of the clamp conforming the first opposing interior socket surfaces in a relatively rotational relationship with the coupling member, wherein the opposing
10 interior socket surfaces partially encompass a spherical volume having substantially the same diameter as the substantially spherical portion of the coupling member, whereby the socket and the coupling member are relatively rotatable, and

another adjustment of the clamp conforming the first opposing interior socket surfaces in an interlocking relationship with the coupling member, wherein the opposing
15 interior socket surfaces partially encompass opposing spherical segments of the coupling member that are spaced apart a distance that, combined with a height of each of the opposing spherical segments, is less than the unconstrained diameter of the substantially spherical portion of the coupling member, whereby the socket deforms the coupling member and interlocks the socket and the coupling member in a relative angular orientation.

20 ⁴³/₅₀. (Once Amended) An interlocking ball and socket joint comprising:

a coupling member having a radially compressible material formed in a substantially spherical shape having an uncompressed outer diameter, the radially compressible material being formed around and rotationally fixed to a relatively rigid core having a projection extending outside of the unconstrained diameter;

25 a socket adapted to accept a mechanical attachment and comprising two or more substantially rigid socket members each having substantially smooth concave radial surfaces having radii substantially identical to the radius of the uncompressed outer diameter of the coupling member, the surfaces coextending with a portion of the uncompressed outer diameter

of the spherical portion of the coupling member, one of the smooth concave surfaces having an indentation formed therein; and

an adjustable clamp mechanically attached to the socket members and subsequently positioning the socket members in a plurality of opposing relationships to one another,

5 one adjustment of the clamp positioning the socket members in a opposing relationship on either side of the coupling member and relatively rotatable thereto, and

another adjustment of the clamp positioning the socket members in a opposing relationship on either side of the coupling member and compressing the radially compressible material thereof, whereby the socket members substantially compress the coupling member and
10 interlock the socket members with the coupling member in a relative angular orientation.

52. (Once Amended) A method of forming a universally positionable device for fixing relative angular orientation between a ball and a socket, the method comprising:

mechanically fixing a substantially globular structure of sturdy but compressible material around a first end of a rigid mechanical structure having first and second ends;

15 adapting the second end of the rigid mechanical structure to accept a mechanical attachment thereto; and

disposing two opposing socket surfaces about the globular structure, the two opposing socket surfaces adapted for disposing in a first relatively rotational relationship thereto and a second angularly fixed relationship thereto, wherein the compressible material is compressed
20 between the two opposing socket surfaces.

53. (Once Amended) The method of claim 52, wherein mechanically fixing a substantially globular structure of sturdy but compressible material around a first end of an rigid mechanical structure further comprises forming the globular structure having an uncompressed radius substantially identical to one of the two opposing socket surfaces.

25 54. (Once Amended) The method of claim of claim 52, wherein mechanically fixing a substantially globular structure of sturdy but compressible material around a first end of an

rigid mechanical structure further comprises forming the globular structure with a substantial smooth surface.

55. (Once Amended) The method of claim of claim 52, wherein disposing two opposing socket surfaces about the globular structure further comprises forming each of the
5 two opposing socket surfaces as substantially smooth and rigid concave surfaces.

56. (Once Amended) The method of claim of claim 52, further comprising:
mechanically fixing a second substantially globular structure of sturdy but compressible material around a first end of a second rigid mechanical structure having first and second end
adapting the second end of the second rigid mechanical structure to accept a
10 mechanical attachment thereto; and
disposing two opposing second socket surfaces about the second globular structure, the two opposing second socket surfaces adapted for disposing in a first relatively rotational relationship thereto and a second angularly fixed relationship thereto, wherein the compressible material is compressed between the two opposing second socket surfaces.

15 57. (New) The method of claim of claim 52, wherein disposing two opposing socket surfaces about the globular structure further comprises forming an artifact within an interior surface of at least one of the two opposing socket surfaces.

1 58. (New) The method of claim of claim 57, wherein forming an artifact within an interior surface of at least one of the two opposing socket surfaces further comprises forming an
20 indentation within the interior surface of the socket surface.

45 59. (New) An interlocking ball and socket joint comprising:
a coupling member partially formed of a resilient deformable material in a substantially unbroken globular shape having an unconstrained diameter and substantially encompassing a mechanical core adapted to accept a mechanical attachment outside the unconstrained
25 diameter;

a socket having first substantially opposing interior surfaces shaped to substantially conform to the substantially globular portion of the coupling member, one of the interior surfaces being a smooth concave surface having an indentation formed therein;

an adjustable clamp disposed subsequently in a plurality of different adjustment relationships to the opposing concave socket surfaces,

one adjustment of the clamp conforming the first opposing interior surfaces in a relatively rotational relationship with the coupling member, wherein the interior socket surfaces partially encompass a spherical volume having substantially the same diameter as the globular portion of the coupling member, whereby the socket and the coupling member are relatively rotatable, and

another adjustment of the clamp conforming the first opposing interior surfaces in an interlocking relationship with the coupling member, wherein the opposing interior socket surfaces partially encompass opposing spherical segments of the coupling member that are spaced apart a distance that, combined with a height of each of the spherical segments, is less than the unconstrained diameter of the globular portion of the coupling member, whereby the socket deforms the coupling member and interlocks the socket and the coupling member in a relative angular orientation.

60. (New) An interlocking ball and socket joint comprising:

a coupling member having a radially compressible material formed in a substantially unbroken spherical shape having an uncompressed outer diameter and formed around a relatively rigid core having a projection extending outside of the unconstrained diameter;

a socket adapted to accept a mechanical attachment and comprising two or more substantially rigid socket members each having substantially smooth concave surfaces coextending with a portion of the uncompressed outer diameter of the spherical portion of the coupling member, one of the smooth concave surfaces having a structure formed therein;

an adjustable clamp mechanically attached to the socket members and subsequently positioning the socket members in a plurality of opposing relationships to one another.